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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,328	07/02/2001	Masaakira Horino	010830	6708

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EXAMINER

OSTRUP, CLINTON T

ART UNIT	PAPER NUMBER
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1614

DATE MAILED: 07/02/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/895,328

Applicant(s)

HORINO, MASAAKIRA

Examiner

Clinton Ostrup

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other:

## DETAILED ACTION

Claims 2-14 are pending in this application.

### Response to Applicant's Arguments/Amendment

Applicant's arguments filed April 16, 2003, Paper No. 13, to the rejection of claim 2-14 under 35 U.S.C. 103(a) as being unpatentable over Nakane et al., **5,122,418**, and further in view of Peterson et al., **6,004,584**, have been fully considered, however the arguments are not deemed persuasive and the said rejection has been MAINTAINED for the reasons set forth in the previous Office Actions mailed January 16, 2003, Paper No. 12, July 1, 2002, Paper No. 6, and, January 15, 2002, Paper No. 4 as well those found below.

Applicants argue that there does not appear to be a suggestion to create the claimed invention because the prior art does not teach or suggest all the claim limitations, with a suggestion or motivation to combine the references to arrive at the claimed invention with a reasonable expectation of success.

In response to applicant's argument that the rule cited by the MPEP 2144.01, IV and 2144.06 do not apply to the instant claims, the examiner respectfully disagrees. This rule cited by the MPEP, wherein size, shape, or sequence of adding ingredients in any order is *prima facie* obvious. Specifically, MPEP MPEP 2144.01, IV, C. teaches:

#### C. Changes in Sequence of Adding Ingredients

Ex parte Rubin, 128 USPQ 440 (Bd. App. 1959) (Prior art reference disclosing a process of making a laminated sheet wherein a base sheet is first coated with a metallic film and thereafter impregnated with a thermosetting material was held to render *prima facie* obvious claims directed to a process of making a laminated sheet by reversing the order of the prior art process steps.). See also In re

Art Unit: 1614

Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.).

Applicant further argues that although Nakane teaches two elements from the group consisting of core substances, hydroxyapatite, and zinc oxide, in no instance does Nakane disclose the use of all three elements and in the examples of Nakane, all ingredients are blended at the same time in a mixer, which would result in a composite, not the layering of particles on other particles. The examiner respectfully disagrees.

First, the entire Nakane reference is drawn to "a composite powder wherein the surface of one powder is substantially covered with another type of coating powder, thereby improving the surface characteristics of the powder, and a production process and use thereof." See: col. 1, lines 14-19. Secondly, as discussed in the previous Office Action, Nakane teaches the preferred ingredients as hydroxyapatite, zinc oxide, and aluminum hydroxychloride. Finally, it is reasonable to expect that the process of mixing the three preferred powders of Nakane, which meet the instantly claimed powders, will result in a layered powder as claimed.

Applicant then argues that Peterson appears to merely teach a mixture of zinc oxide with a powder, but not a particle having a layered coating of zinc oxide over a powder. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, Nakane was cited used to show a composite powder

Art Unit: 1614

wherein the surface of one powder is substantially covered with another type of coating powder, thereby improving the surface characteristics of the powder and Peterson was used for its teaching of powdered compositions for moisture adsorption comprising spherical particles as well as platelet-shaped particles, thus meeting the shape limitation of claim 8.

In regard to applicants argument that the examiner has not commented on the "evidence of unexpected results of the present invention over those taught by Nakane et al and Peterson et al., the examiner would like to point out that the comparative analysis did not combine the ingredients the examiner suggested as making the instant invention obvious, namely, the preferred ingredients of Nakane, hydroxyapatite, zinc oxide, and aluminum hydroxychloride. Instead the experimental results compared Example 1 of the instant invention, comprising sericite, water, calcium acetate, sodium hydroxide, etc., to that of Example 29, 23, and 15 of Nakane et al and a mixture of sericite, low crystalline ZnO and hydroxyapatite. This may show the "unexpected results" of the instant applications Example 1 from that of Examples 29, 23, and 15, of Nakane, and a mixture of sericite, low crystalline ZnO and hydroxyapatite; however, it does not teach or show "unexpected results" of the invention, as claimed.

Applicant has addressed the rejection of claims 2-14 which were rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al., and Kaji et al., as if it were applicable to claims 7-8 only; however this was not the rejection. In fact the previous two Office Actions Paper Nos. 6 and 12 have rejected claims 2-14 over Nakane et al., and Kaji et al.

Art Unit: 1614

Applicant then argues that Kaji et al. does not teach or suggest a three layered powder having hydroxyapatite layered on a core powder and zinc oxide layered on the hydroxyapatite powder. As discussed in the previous Office Action, Kaji et al., was used for teaching the size and shape limitations of instant claims 7-8, not for the teaching of a layered powder material. Moreover,

Therefore, the examiner Maintains that although the specific coating sequence is not specifically taught by the primary references, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the resin treated hydroxyapatite cosmetic powders of Nakane et al., by using the tabular shaped hydroxyapatite and covering the hydroxyapatite powders as taught by Kaji et al., to form powders comprising resins substantially covered with tabular hydroxyapatite and then said tabular hydroxyapatite being covered by zinc oxide because of the reasonable expectation of obtaining a skin treatment powdered compositions with better spread and adhesion.

This being particularly obvious when the specified ingredients hydroxyapatite, zinc oxide, and aluminum hydroxychloride are taught to be the preferred active deodorizing ingredients by the primary reference, the secondary reference teaches coating hydroxyapatite with zinc oxide, and the idea of combining two compositions, each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose, flows logically from their having been individually taught in the prior art particularly when. See: MPEP 2144.04, IV and 2144.06.

***Maintained Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. **5,122,418** (Nakane), and further in view of Peterson et al., **6,004,584** (Peterson).

Nakane discloses a composite powder wherein the core powder is covered with one or more powders wherein said composite powder could be used as a skin treatment agent or in sunburn preventing cosmetics, and deodorants. See: col.4, line 51- col. 6, line 11; claims 1-5 and abstract.

Nakane teaches the composite powder having an average particle size of 1 to 100 microns and zinc oxide having an average particle size of 0.01 to 1 microns, thus teaching the zinc oxide and powder sizes of instant claim 9. See: col. 7, line 25 – col. 10, line 44. The reference further teaches that a preferred deodorant composite powder contains a resin powder and hydroxyapatite, zinc oxide, and aluminum hydroxychloride and any other known component such as talc, bentonite, mica, etc., thus meeting the limitations of instant claims 1-2 and 5-6. See: col. 11, line 9 – col. 12, line 25.

The reference teaches that the skin treatment agent of their invention has a superior feel, adsorbs the decomposed sebum and maintains the skin in its normal state, thus teaching instant claim 13. See: col. 12, line 26 - col. 13, line 35.

Nakane teaches skin care agents and cosmetics comprising a composite powder covered by hydroxyapatite and zinc oxide as discussed above. Nakane teaches that a

Art Unit: 1614

spherical particle includes deformed particles. See: col. 1, lines 14-44. However, the primary reference lacks the crystalline size and shape of instant claims 7-8.

Peterson teaches compositions for moisture adsorption comprising spherical particles as well as platelet-shaped particles. See: col. 1, line 5 – col. 2, line 34 and abstract. The reference teaches that the powder carriers of their invention provide good skin feel characteristics and are used where increased levels of moisture absorbers are included in body powders. See: col. 2, line 40 – col. 4, line 11. The secondary reference teaches that zinc oxide is preferably added to the composition as an antimicrobial agent and that mica, talc, etc., are the platelet shaped particles useful in their invention. See: col. 4, lines 35 – 68 and col. 5, line 43 – col. 6, line 4.

It would have been obvious to one having ordinary skill in the art to have modified the skin treatment powders of Nakane by coating powders with other shapes such as, the platelet shaped particles of Peterson, because of the expectation of obtaining a skin care agent capable of adsorbing moisture with powder carriers which are particularly formulated to provide good skin feel.

Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. **5,122,418** (Nakane) as applied to claims 2-6 and 9-14 above, and further in view of Kaji et al., JP 11-140819.

Nakane teaches skin care agents and cosmetics comprising a composite powder covered by hydroxyapatite and zinc oxide as discussed above. Nakane teaches that a spherical particle includes deformed particles. See: col. 1, lines 14-44. However, the primary reference lacks the crystalline size and shape of instant claims 7-8.

Art Unit: 1614

Kaji et al., teach cosmetic compositions comprising a tabular shaped hydroxyapatite and zinc oxide in a powdered form. See: Examples, pages 1-4. The Kaji et al., reference teaches tabular hydroxyapatite is better than spherical hydroxyapatite because, for examples, it adheres and spreads better on the skin. See: Abstract, Prior art, and Effect of Invention. Kaji et al., teach hydroxyapatite as being mixed and covered with various organic and inorganic compounds, which use the hydroxyapatite as a nucleus and then form a covering or surface treatment on the hydroxyapatite. See: Means, pages 1-3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the resin treated hydroxyapatite cosmetic powders of Nakane et al., by using the tabular shaped hydroxyapatite and covering the hydroxyapatite powders as taught by Kaji et al., to form powders comprising resins substantially covered with tabular hydroxyapatite and then said tabular hydroxyapatite being covered by zinc oxide to deliver powdered compositions with better spread and adhesion.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1614

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clinton Ostrup whose telephone number is (703) 308-3627. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on (703) 308-4725. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Application/Control Number: 09/895,328  
Art Unit: 1614

Page 10

Clinton Ostrup  
Examiner  
Art Unit 1614

A handwritten signature in black ink, appearing to read 'Clinton Ostrup', written in a cursive style.

Frederick Krass  
Primary Examiner  
Art Unit 1614

A handwritten signature in black ink, appearing to read 'Frederick Krass', written in a cursive style.

June 30, 2003